

CALL FOR APPLICATIONS

Job:

Job reference:	AE2017-0325 (SMILES-5 - CSIG) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Position:	Post-Doc Grants (BPD)
City:	Porto
Research field:	Main: COMPUTER SCIENCE Sub: Computer Systems

Job summary:

INESC TEC is accepting applications to award 1 Postdoctoral Grant .	
Project:	SMILES - Smart, Mobile, Intelligent and Large scale Sensing and analytics (NORTE-01-0145-FEDER-000020)
Scientific Advisor:	João Paiva Cardoso
Duration Grant:	from 2018-01-01 to 2018-06-30 (6) . The grant may be renewed for additional periods up to the maximum duration of the project or the duration of the grant for which the candidate was selected. It can also be renewed due to another project provided that it is entirely or partly related to the work area in the call and that it contributes to the ongoing training.
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: High-Performance Embedded Computing
Project overview: The work to be done is related to the research, development and integration of techniques that map code written in higher-level languages (e.g., MATLAB, C) to multiple multicore CPUs. We intend to explore selection) compiler optimizations (e.g., phase ordering e flag selection) and to identify parallelization strategies via OpenMP aware of the execution time and energy consumption.
Objectives: - R&D of phase ordering and phase selection techniques in the context of the GCC and LLVM compilers; - Identification of parallelization strategies via OpenMP and specification of the strategies using LARA so that they can be automatically applied using the MATISSE compiler. - Test and evaluation of the proposed techniques

Academic Qualifications:	PhD in Informatics Engineering, Electrical and Computer Engineering, or Computer Science
Minimum Profile required:	PhD Thesis related with compilers and compiler optimizations; At least 2 publications in top-level conferences/workshops in the compilers research area; 2 papers in journals
Preference factors:	- Knowledge of MATLAB/Octave - Knowledge about compilers and source to source compilation, especially from MATLAB to C; - Knowledge and exp. of parallelization of applications using OpenMP;
Monthly Grant:	€1495,00 according to the Stipends values of the grants awarded directly by the FCT, paid by bank transfer. The grant holder may also benefit from additional incomes in the sequence of a quarterly evaluation process (Clauses 12 and 13 of INESC TEC Grants Regulation and Annex II), up to a maximum of 50% of the monthly grant.

Project duration:	2015-07-01 a 2018-06-30
Funding Entity:	CCDRN, funded by the European Regional Development Fund (ERDF) through the North Regional Operational Program (North 2020) NORTE-01-0145-FEDER-000020.
The grant contract shall be submitted to the legislation concerning the Research Grant Holder Statute , approved by Law n 40/2004, dated 18 August, amended and republished by Decree-Law No. 202/2012 of 27 August and amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of July 9 as well as by INESC TEC Grant Regulation , approved by FCT - Fundação para a Ciência e a Tecnologia (Science and Technology Foundation) in 12 January 2011 and FCT current Grant Regulation. Additional information about INESC TEC Grants Regulation and relating annexes may be found at www.inesctec.pt/grants	

Selection Criteria: Curriculum evaluation based on the criteria referred to in Clause 7 INESC TEC Grants Regulation and will include individual interviews in the final stage of the selection process, with its valuation: 70% curriculum evaluation (30% CV, 20% scientific domains and 20% Expertise) and 30% interview. Only those candidates who obtain at least 70% in the curricular evaluation (CV + Scientific Domain + Experience) will be called for the interview.	
Selection Jury:	President of the Jury: Prof. João Paiva Cardoso; Permanent Member: Prof. João Bispo; Substitute Member: Prof. Hamid Arabnejad;
Notification of results:	The results of the selection process will be disseminated to interested parties by mail, as referred to in Clause 8 of INESC TEC Grants Regulation .
Application period:	From 2017-12-06 to 2017-12-21
Application submission:	Fill in the electronic form in the section Work with Us at www.inesctec.pt , attaching the Curriculum Vitae, certificate of qualifications and other supporting documents relevant to the final assessment.